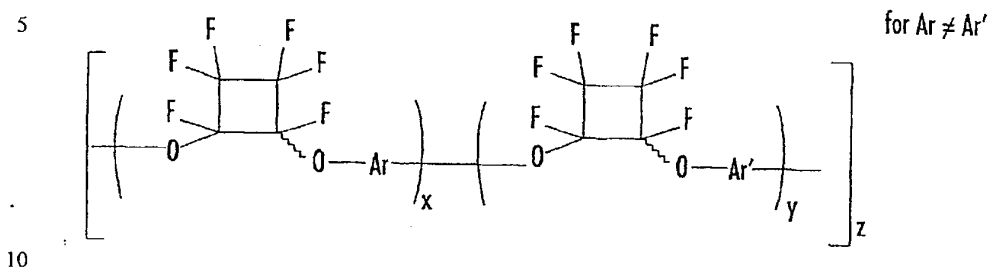


What is claimed is:

1. A method of making an optical device, comprising:

(a) providing a copolymer composition of the structural formula:



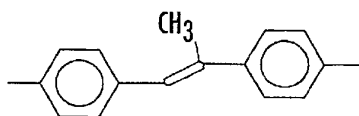
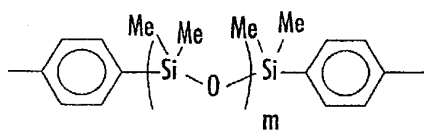
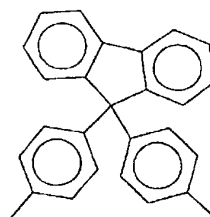
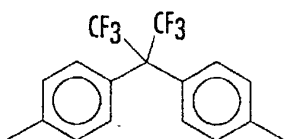
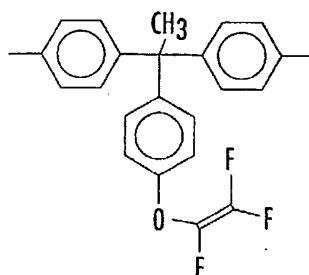
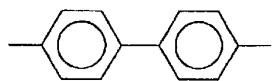
wherein z is greater than or equal to 2, and

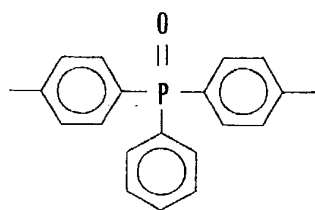
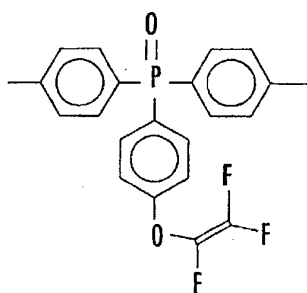
wherein x and y each are greater than or equal to 1, respectively, and

wherein the Ar and the Ar' groups each comprise substituted or nonsubstituted
 15 aryls selected from the group comprising:

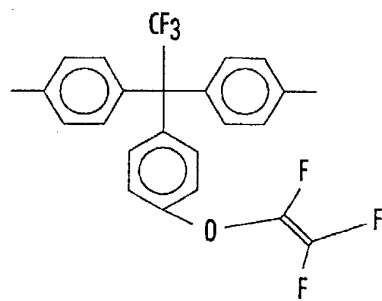
20

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and



, and

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(b) applying the copolymer composition by coating to form a film.

2. The method of claim 1 in which the copolymer is prepared from a trifluorovinyl aromatic ether.

3. The method of claim 1 in which the copolymer composition is spin coated.

4. The method of claim 1 in which the copolymer composition is coated by dipping.

5. The method of claim 1 in which the copolymer composition is dissolved in a solvent prior to coating the copolymer composition.

6. The method of claim 1 comprising the additional step of:
(c) thermally curing the film to form a cured thermoset film.

7. The method of claim 6 in which the thickness of the thermoset film is at least about 0.6 microns.

8. The method of claim 6 in which the thickness of the thermoset film is at least about 0.8 microns.

9. The method of claim 6 in which the thickness of the thermoset film is at least about 0.9 microns.

10. The method of claim 6 in which the thickness of the thermoset film is at least about 1 micron.

11. The method of claim 6 in which the thickness of the thermoset film is at least about 2 microns.

12. The method of claim 6 in which the thickness of the thermoset film is at least about 3 microns.

13. The method of claim 6 in which the thickness of the thermoset film is at least about 4 microns.

14. The method of claim 6 in which the thickness of the thermoset film is at least about 5 microns.

15. The method of claim 6 in which the thickness of the thermoset film is at least about 10 microns.

16. A method of making an optical device, comprising:

- (a) providing a perfluorocyclobutyl-based copolymer composition,
- (b) coating the perfluorocyclobutyl-based copolymer composition upon a substrate to form a first film, and

(c) thermally curing the first film to form a thermoset film.

17. The method of claim 16 in which the thermoset film comprises a substantially transparent polymeric core.

18. The method of claim 17 comprising the additional step of:

- (d) applying cladding to the outer surface of the core to form an optical waveguide.

10 19. The method of claim 16 in which the coating step is accomplished
by spin coating.

20. The method of claim 16 in which the perfluorocyclobutyl-based
copolymer composition is applied to the substrate in a solution having at least
15 about 25% solids by weight.

21. The method of claim 16 in which the perfluorocyclobutyl-based
copolymer composition is applied to the substrate in a solution having at least
about 40% solids by weight.

20 22. The method of claim 16 in which the perfluorocyclobutyl-based
copolymer composition is applied to the substrate in a solution having at least
about 60% solids by weight.

25 23. The method of claim 16 in which the perfluorocyclobutyl-based
copolymer composition is applied to the substrate in a solution having at least
about 70% solids by weight.

30 24. The method of claim 16 in which the cured film comprises a
thickness of at least about 1 micron.

25. The method of claim 16 in which the cured film comprises a
thickness of at least about 2 microns.

35 26. The method of claim 16 in which the cured film comprises a
thickness of at least about 3 microns.

27. The method of claim 16 the film is formed from a coating comprised
from a mixture of perfluorocyclobutyl based homopolymers.

(a) providing a perfluorocyclobutyl-based copolymer composition,

5 (c) thermally curing the first film to form a cured film having a thickness of at least about 2 micron.

(a) providing a perfluorocyclobutyl-based copolymer composition having a solids content of at least about 50%,

(c) thermally curing the first film to form an optical device, thereby forming an optical device having a cured film thickness of at least about 0.6 microns.

30. A solution for making an optical device in which the solution

31. The solution of claim 30 in which the solution is composed of a

32. The solution of claim 30 in which the solution comprises a mixture

項目	単位	数値	単位	数値
1. 総人口	人	1,234,567	2. 男性人口	人
3. 女性人口	人	654,321	4. 人口密度	人/平方キロメートル
5. 出生率	‰	12.5	6. 死亡率	‰
7. 自然増減率	‰	1.5	8. 人口移動	人
9. 人口移動	人	10,000	10. 人口移動	人
11. 人口移動	人	5,000	12. 人口移動	人
13. 人口移動	人	2,000	14. 人口移動	人
15. 人口移動	人	1,000	16. 人口移動	人
17. 人口移動	人	500	18. 人口移動	人
19. 人口移動	人	200	20. 人口移動	人
21. 人口移動	人	100	22. 人口移動	人
23. 人口移動	人	50	24. 人口移動	人
25. 人口移動	人	20	26. 人口移動	人
27. 人口移動	人	10	28. 人口移動	人
29. 人口移動	人	5	30. 人口移動	人
31. 人口移動	人	2	32. 人口移動	人
33. 人口移動	人	1	34. 人口移動	人
35. 人口移動	人	0.5	36. 人口移動	人
37. 人口移動	人	0.2	38. 人口移動	人
39. 人口移動	人	0.1	40. 人口移動	人
41. 人口移動	人	0.05	42. 人口移動	人
43. 人口移動	人	0.02	44. 人口移動	人
45. 人口移動	人	0.01	46. 人口移動	人
47. 人口移動	人	0.005	48. 人口移動	人
49. 人口移動	人	0.002	50. 人口移動	人
51. 人口移動	人	0.001	52. 人口移動	人
53. 人口移動	人	0.0005	54. 人口移動	人
55. 人口移動	人	0.0002	56. 人口移動	人
57. 人口移動	人	0.0001	58. 人口移動	人
59. 人口移動	人	0.00005	60. 人口移動	人
61. 人口移動	人	0.00002	62. 人口移動	人
63. 人口移動	人	0.00001	64. 人口移動	人
65. 人口移動	人	0.000005	66. 人口移動	人
67. 人口移動	人	0.000002	68. 人口移動	人
69. 人口移動	人	0.000001	70. 人口移動	人
71. 人口移動	人	0.0000005	72. 人口移動	人
73. 人口移動	人	0.0000002	74. 人口移動	人
75. 人口移動	人	0.0000001	76. 人口移動	人
77. 人口移動	人	0.00000005	78. 人口移動	人
79. 人口移動	人	0.00000002	80. 人口移動	人
81. 人口移動	人	0.00000001	82. 人口移動	人
83. 人口移動	人	0.000000005	84. 人口移動	人
85. 人口移動	人	0.000000002	86. 人口移動	人
87. 人口移動	人	0.000000001	88. 人口移動	人
89. 人口移動	人	0.0000000005	90. 人口移動	人
91. 人口移動	人	0.0000000002	92. 人口移動	人
93. 人口移動	人	0.0000000001	94. 人口移動	人
95. 人口移動	人	0.00000000005	96. 人口移動	人
97. 人口移動	人	0.00000000002	98. 人口移動	人
99. 人口移動	人	0.00000000001	100. 人口移動	人